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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,578	07/11/2003	Steven P. Nally	108298533US1	3549
25096	7590	07/28/2006	EXAMINER	
PERKINS COIE LLP			ALANKO, ANITA KAREN	
PATENT-SEA			ART UNIT	
P.O. BOX 1247			PAPER NUMBER	
SEATTLE, WA 98111-1247			1765	

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/617,578

Applicant(s)

NALLY ET AL

Examiner

Anita K. Alanko

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/15/06 amdt.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-25,49-52 and 56-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-25,49-52 and 56-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 22 is rejected under 35 U.S.C. 102(b) as being anticipated by Kye et al (KR 1997-0008549).

Kye discloses a method (page 2 of English translation, Fig.1) comprising chemically etching (page 2, lines 17-21) at least a portion of the surface (markings are removed) to remove a layer of material from the package and form a marking surface; and

cleaning residual materials (with water, page 2, lines 28-33) from the package after terminating the etching of the package surface.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kye et al (KR 1997-0008549).

The discussion of Kye from above is repeated here.

As to claim 23, Examiner takes official notice that HF is a conventional etchant. It would have been obvious to one with ordinary skill in the art to use HF to etch in the modified method of Kye because it is a conventional etching composition.

As to claim 25, since the modified method of Kye has controlled removal of a mark, it would have been obvious to one with ordinary skill in the art to control the depth to move undesired surface features such as blemishes, thereby obtaining a desired surface finish, because chemical etching allows for control over the rate of etching by controlling the composition, delivery and parameters of etching.

Claims 49-50, 52, 56, 58-61 rejected under 35 U.S.C. 103(a) as being unpatentable over Kye et al (KR 1997-0008549) in view of Blair (US 6,413,150 B1).

The discussion of Kye from above is repeated here.

As to claims 49 and 60, Kye does not disclose how the substrate is handled during the etching. It would have been obvious to one with ordinary skill in the art to place them on a

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common substrate to etch them in the method of Kye in order to speed up the processing so that multiple substrates can be processed together.

Blair teaches that that a useful technique is that once several chips 410 are on a common substrate 402, that they can be cut (by blade 401, Fig.4a, see also Fig.8a-8c). It would have been obvious to one with ordinary skill in the art to cut the common substrate to separate the devices from one another in the modified method of Kye because Blair teaches that this is a useful technique to provide the devices.

As to claims 50 and 58, Kye does not disclose the composition of the etchant. Examiner takes official notice that HF acid is a conventional etchant. It would have been obvious to one with ordinary skill in the art to use hydrofluoric acid as cited in the method of Kye because it is a conventional etchant.

As to claims 52 and 59, see the rejection of claim 25.

As to claim 56, Kye does not disclose the specific molding steps, however these are conventional in the art. It would have been obvious to one with ordinary skill in the art to mold and remove the package from the mold as cited in the method of Kye because they are conventional, useful techniques in the art.

As to claim 61, it would have been obvious to process the primary marking surface since it is useful to remove marks from any surface that they are on.

Claims 24 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kye et al (KR 1997-0008549) and Tsuchiko et al (JP 01-067346 A).

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As to claims 24 and 57, Tsuchiko teaches that a useful technique for removing material from the surface 4 of packages 2 comprises etching 7 through a mask 5 (see abstract). Tsuchiko does not disclose to clean after etching. The discussion of Kye from above is repeated here.

It would have been obvious to one with ordinary skill in the art to clean after etching in the method of Tsuchiko because Kye teaches that this is useful to do after etching.

Alternatively, it would have been obvious to use a mask as taught by Tsuchiko in the method of Kye because Tsuchiko teaches that using masks to form etched surfaces or cavities is useful.

Claims 51 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kye et al (KR 1997-0008549), Blair (US 6,413,150 B1) and Tsuchiko et al (JP 01-067346 A).

As to claims 51 and 62, Tsuchiko teaches that a useful technique for removing material from the surface 4 of packages 2 comprises etching 7 through a mask 5 (see abstract). Tsuchiko does not disclose to clean after etching. The discussion of modified Kye from above is repeated here.

It would have been obvious to one with ordinary skill in the art to clean after etching in the method of Tsuchiko because modified Kye teaches that this is useful to do after etching.

Alternatively, it would have been obvious to use a mask as taught by Tsuchiko in the modified method of Kye because Tsuchiko teaches that using masks to form etched surfaces or cavities is useful.

Response to Amendment

Applicants arguments filed 5/15/06 are persuasive. The rejection using Eom is withdrawn since Eom is not prior art. The rejection over Canella is withdrawn since Canella does not disclose chemical etching.

The claims are newly rejected over Kye et al. Kye discloses to de-mark by chemical etching, followed by rinsing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anita K. Alanko whose telephone number is 571-272-1458. The examiner can normally be reached on Mon-Fri until 2:30 pm (Wed until 11:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on 571-272-1465. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anita K. Alanko
Anita K Alanko
Primary Examiner
Art Unit 1765